PART VI: DISPOSAL IN SECURE CELLS

The Permittee is allowed to dispose of hazardous waste in secure cells following the requirements of 6 CCR 1007-3 Part 264 Subpart N and in the following manner:

VI.A. UNIT DESCRIPTION

The Facility is permitted for seven secure disposal cells. The cells will have the following approximate volumes: Cell 1 - 173,000 yds^3, Cell 2 - 220,600 yds^3, Cell 3 - 480,240 yds^3, Cell 4 - 491,840 yds^3, Cell 5 - 472,120 yds^3, Cell 6 - 433,840 yds^3, Cell 7 - 466,320 yds^3. The total maximum permitted capacity is 2,737,960 yds^3. The Secure Cell configuration is shown in Figure 6 of Permit Attachment 10.

VI.B. PERMITTED AND PROHIBITED WASTE IDENTIFICATION

VI.B.1. The following table lists the approved waste codes for disposal in the secure landfill cells, provided the waste meets the applicable Land Disposal Restrictions specified in 6 CCR 1007-3 §268:

D Codes	F Codes	K Codes	P Codes	U Codes
D001 thru D043	F001 thru F012 F019 thru F028 F032 F034, F035 F037 thru F039	K001 thru K052 K060 thru K062 K064 thru K066 K069, K071 K073 K083 thru K088 K090, K091 K093 thru K118 K123 thru K126 K131, K132 K136, K140 K141 thru K145 K147 thru K151 K156 thru K161 K169 thru K172 K176 thru K178 State Codes K901-meeting demilitarization standards K902 –meeting demilitarization standards.	P001 thru P018 P020 thru P031 P033 thru P051 P054 P056 thru P060 P062 thru P078 P081, P082 P084, P085 P087 thru P089 P092 thru P099 P101 thru P116 P118 - P123 P127, P128 P185 P188 thru P192 P194 P196 thru P199 P201 thru P205 State Codes P909-911-meeting demilitarization standards	U001 thru U012 U014 thru U223 U225 thru U249 U271 U277 thru U280 U328, U353, U359 U364 thru U367 U372, U373 U381 thru U387 U389 thru U396 U400 thru U404 U409, U410, U411

VI.B.2. Hazardous wastes must meet all applicable land disposal restrictions prior to disposal.

VI.B.3. Non-hazardous wastes, radioactive materials and regulated wastes which contain free liquids or produce a leachate with hazardous constituents are not permitted for disposal in the Secure Cells unless they are treated as necessary to pass the free liquids and leachability acceptance tests.

VI.B.4. Leachable Constituents

VII.b.4.a. Leachable constituent values shall be determined by the Toxicity Characteristic Leaching Procedure (TCLP) contained in SW-846 (Method 1311).

VI.B.4.b. The Permittee shall not accept for disposal a waste stream which contains leachable HDPE incompatible constituents. The Permittee shall evaluate each waste to determine HDPE liner compatibility and document the evaluation in the Operating Record

VI.B.5. Radioactive wastes, in compliance with the levels in Radioactive Materials License 1102-01, may be accepted at the Facility. These wastes must be managed in accordance with the conditions in Radioactive Materials License No. 1102-01.

VI.B.6. Bulk polychlorinated biphenyls ("PCBs") at concentrations $\leq$ 50ppm or PCB remediation waste, at concentrations $\geq$ 50 ppm, as authorized under the Toxic Substances Control Act 40 CFR Part 761.61(a)(5)(i)(B)(2)(iii) may be accepted.

VI.B.7. The following wastes are prohibited from disposal in secure cells, or require treatment or special handling such as segregation or containerization as noted:

Any waste containing free liquids as determined according to EPA Method 9095
Hydrophobic or pyrophoric/air reactive materials
DOT Forbidden Explosives
Shock Sensitive Materials
Infectious Wastes
Compressed Gases
Wastes which are ignitable below 140°F
Wastes exhibiting a pH less than 2.5 or pH greater than 12.5, including containerized wastes

Wastes that release greater than 500 ppm sulfide or 250 ppm cyanide when subjected to a change in pH. Wastes that release greater than 20 ppm sulfide or greater than 10 ppm cyanide shall be segregated from other wastes which have a pH < 5.0.
Lab packs that do not meet the requirements of 6 CCR 1007-3 §268.

VI.B.8. The Permittee is prohibited from disposing in secure cells any hazardous waste that is not included in Permit Condition VI.B.1.

VI.C. DESIGN REQUIREMENTS

VI.C.1. Drawings and Plans

VI.C.1.a. Construction phasing of individual secure cells will proceed as needed for waste disposal operations. Construction drawings for each cell will be prepared and submitted to CDPHE for approval 45 days prior to commencement of cell construction. The drawings must include details regarding the potentially contaminated runoff drainage ditches associated with each cell. The drawings must be approved by CDPHE prior to commencement of cell construction and will be incorporated into Permit Attachment 10 as a Class 1 with Prior Approval Modification.

VI.C.1.b. A cell specific filling plan will be prepared for each cell as part of the final design studies. This plan will incorporate operational requirements, stability constraints, and surface water control features. This cell specific filling plan will be submitted to CDPHE 30 days prior to planned waste placement in each cell. The Plan will be approved by CDPHE prior to commencement of waste placement in each cell. The Plan will be incorporated into the Permit as a Class 1 Modification.

VI.C.1.c. As-built drawings for completed cells will be submitted to CDPHE upon completion of construction of each secure cell as part of the Certification Report. The as-built drawings will be incorporated into the CDPHE Administrative Record for the Facility and into the Facility's Operating Record.

VI.C.2. The Permittee shall install two composite liners and a leachate collection system and removal system, one above and one between the liner systems, in accordance

with the design plans and specifications contained in Permit Attachments 1 and 10. [6 CCR 1007-3 §264.301(c)]

VI.C.3. Liner Systems Descriptions

VI.C.3.a. Secure Cells 1 and 2

The base liner system consists of (from bottom to top) prepared subgrade, three feet of compacted clay, an 80-mil HDPE geomembrane liner, (these two components comprise the secondary composite liner system), a geocomposite leak detection system, three feet of compacted clay, an 80-mil HDPE geomembrane liner (these two component comprise the primary composite liner system), a geocomposite leachate collection system, one foot of sand, and two feet of compacted protective soil. A Permanent Sump is installed under the Leak Detection Sump and consists of gravel surrounded by geotextile fabric.

The sideslope liner system consists of (from bottom to top) prepared subgrade, 4.5 feet of compacted clay, an 80-mil HDPE geomembrane liner, (these two components comprise the secondary composite liner), a geocomposite drainage layer, three feet of compacted clay, an 80-mil HDPE geomembrane liner, (these two components comprise the primary liner system), a geocomposite drainage layer and 1.5 feet of protective soil layer.

VI.C.3.b. Secure Cells 3 through 7

The bottom liner system shall consist of (from bottom to top) prepared subgrade, three feet of compacted clay, and 80-mil HDPE geomembrane liner, (these two components comprise the secondary composite liner), a geocomposite leak detection system, three feet of compacted clay, a geosynthetic clay liner, an 80-mil HDPE geomembrane liner, (these three components comprise the primary composite liner), a geocomposite drainage layer, one foot of sand, (these two components comprise the leachate collection system), a geotextile, and two foot of protective soil.

The sideslope liner system shall consist of (from bottom to top) prepared subgrade, 4.5 feet of compacted clay, an 80-mil HDPE

geomembrane liner, (these two components comprise the secondary liner system), a geocomposite drainage layer, a geosynthetic clay liner, an 80-mil HDPE geomembrane liner, (these two components comprise the primary liner system), and 1.5 feet of protective soil.

VI.C.4. Leachate Collection Systems

VI.C.4.a. Secure Cell 1

The leachate collection system for Secure Cell 1 is located on the base of the Secure Cell and consists of ten lateral pipes and one header pipe; nine of the lateral pipes are connected to the header pipe, the remaining lateral pipe drains to the leachate collection system sump along with the header pipe.

The 4-inch diameter pipes are installed on top of a geotextile cushion layer that overlies the primary geomembrane liner; the pipes are covered with gravel, and the geotextile cushion layer is wrapped around the gravel. There is one leachate collection system cleanout riser pipe.

VI.C.4.b. Secure Cells 2 through 7

The leachate collection system for Secure Cells 2 through 7 consists and shall consist of two leachate collection pipes that drain to the leachate collection sump and a layer of geonet that extends across the base of the secure cell beneath the geotextile layer. The 8-inch diameter pipes are installed over the geotextile layer, covered with gravel, and the geotextile cushion is wrapped around the gravel. There are three leachate collection system cleanout pipes and a geonet flush pipe is located in the corner of the cell near the access ramp and along the toe of the access ramp slope.

VI.C.5. Leachate, Leak Detection, and Permanent Sump Riser Pipes and Sump Configurations

VI.C.5.a. Secure Cell 1

The Permanent Sump for Secure Cell 1 is accessed by a 14-in diameter HDPE riser pipe placed near the corner of the cell on a 2:1 slope; the bottom one foot section of the pipe is perforated and the bottom end of the pipe is sealed by a HDPE plate welded to its bottom surface. The Leak Detection System for Secure Cell 1 is accessed by a 14-in diameter HDPE riser pipe placed along the corner of the slope; the bottom one foot section of the pipe is perforated and the bottom end is sealed by a HDPE plate welded to its bottom surface. For Secure Cell 1, the Leachate Collection System header pipe and one leachate collection system lateral pipe drain into a 36-inch diameter reinforced concrete riser pipe that rises vertically out of the sump; the concrete riser pipe was extended vertically as the secure cell was filled.

VI.C.5.b. Secure Cells 2 through 7

The Permanent Sump for Secure Cells 2 through 7 is accessed by a 18-inch diameter HDPE riser pipe trenched into the corner of the cell; the liquid in the sump enters the pipe through a perforated section of pipe which lays along the bottom of each sump; the end of the pipe is sealed with a HDPE perforated end cap. The Leak Detection System is accessed by an 18-inch diameter HDPE riser pipe placed along the corner of the slope; the liquid in the sump enters the pipe through a perforated section of pipe which lays along the bottom of each sump; the end of the pipe is sealed with a HDPE perforated end cap. For Secure Cells 2 through 7, the Leachate Collection System drains and is accessed by a 24-inch HDPE riser pipe placed along the corner of the slope; leachate enters the pipe through a 19 foot perforated section of pipe that lays along the bottom of each sump; the end of the pipe is sealed with a HDPE perforated end cap. The sump riser pipes are covered with structural fill.

VI.D. CONSTRUCTION REQUIREMENTS

VI.D.1. The Permittee shall excavate Secure Cells, install liners, sumps, runoff drainage channels and other components as required by 6 CCR 1007-3 §264.301 and §264.310, as specified in the plans and specifications in Permit Attachment 10 and comply with the following requirements.

VI.D.2. Background Soil Sampling - - For Secure Cells 3-7, the background sampling and testing program will take place after construction of each Secure Disposal Cell and related structures as necessary but prior to acceptance of wastes in the Secure Disposal Cell just constructed.

VI.D.2.a. During each phase's background sampling and testing program:

A minimum of five samples will be taken for every 400 feet of roadway constructed during the phase;

A minimum of five samples will be taken for every 400 feet of uncontaminated drainage channel constructed during the phase; and

A minimum of five samples will be taken for every 400 feet of segregated stormwater drainage channel constructed during the phase.

VI.D.2.b. These samples may be composited in a ratio of 2 to 1. The sampling methods, procedures, record keeping protocol and the soil sampling equipment will be those specified in Section III.A.4.c. of the Closure Plan, Permit Attachment 6. The test methods and procedures will be those specified in the Waste Analysis Plan. The soil samples will be taken at a depth of 0-6" and analyzed for soil pH and 6 CCR 1007-3, §261, Appendix VIII constituents identified in Appendix A of Part VI.

VI.D.3. Each secure cell shall be excavated into the Unweathered Pierre Shale. The entire floor of each cell must be contained in the Unweathered Pierre Shale.

VI.D.4. The Permittee shall provide a professional geologist to map, in detail, the natural soils exposed at the limit of each cell excavation, before recompaction or placement of any cell liner component.

VI.D.4.a. Each distinct soil stratum shall be sampled and classified according to ASTM D2487-10.

VI.D.4.b. Soil maps and grain size analyses shall be included in each secure cell certification report.

VI.D.4.c. The Permittee shall provide the Department adequate notice of the mapping schedule and cooperate with Department representatives who may participate in the mapping.

VI.D.5. The Permittee shall remove soils with a Unified Soil Classification (USC) gradation coarser than SM (silty sand) found at the limit of the cell excavation, according to the following criteria: [6 CCR 1007-3 §264.31 and §264.301(c) and (k)]

VI.D.5.a. Soil classified coarser than USC SM shall be removed at the time of cell excavation for a distance of one hundred feet from the nearest point of the secure cell secondary synthetic liner.

VI.D.5.b. Exemption from or modification of the soil removal requirement may be approved if the exemption is adequately justified, and the Department determines, in advance, that soil removal is not necessary.

VI.D.5.c. The Permittee shall replace removed soil with recompacted soil which is of equal or lower hydraulic conductivity than adjacent undisturbed soil.

VI.D.5.d. The Permittee shall provide adequate construction inspection and moisture, density and hydraulic conductivity testing of both undisturbed and replaced soil to verify compliance with Permit Condition VI.D.5.c. The testing program must be submitted to the Department before placement of recompacted soil.

VI.D.5.e. The Permittee shall apply to the Department to modify this Permit, following the procedures in 6 CCR 1007-3 §100.63, if coarse soils required to be removed cannot be practicably removed, or if the Permittee can technically justify that removal of the coarse soils is not required.

VI.D.6. Construction Inspection

VI.D.6.a. Construction inspection of secure cell components, including but not limited to, subsoils, clay and synthetic liner covers and liners, leachate collection, and leak detection systems shall be conducted as described and at the frequencies specified in the Construction Quality Assurance Plan contained in Permit Attachment 10.3.

VI.D.6.b. Clay and geosynthetic clay liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-conformities that may cause an increase in the permeability on the liner or cover. [6 CCR 1007-3 §264.303(a)(2)]

VI.D.6.c. The Permittee shall require leak testing and certification of the entire length of each seam in each geomembrane, including cap and sump welds and connections, by vacuum box, unless an equivalent or more rigorous method is used. [6 CCR 1007-3 §264.303(a)(1)]

VI.D.6.d. The Permittee shall require continuous close inspection by a qualified inspector on foot of spreading or grading of primary and secondary leachate collection sand layers with any earthmoving equipment.

VI.D.6.d.i) All points of contact or possible contact of any part of the earth moving equipment with the synthetic liner shall be immediately exposed with hand tools.

VI.D.6.d.ii) Visible damage, including small scratches, indentations, tears or punctures, must be inspected by the liner installation contract inspector and repaired if necessary.

VI.D.6.d.iii) Locations of every point of visible damage, and the size of every patch, shall be noted on as-built cell design plan sheets included in each cell certification report.

VI.D.7. The source and amount of water used to increase moisture content of compacted clay liners shall be included in the daily inspecting engineer's reports. A summary of the volume and quality of the water used, including quarterly analysis, of each source of water used during that quarter, for the parameters listed

in the Background Groundwater Monitoring Parameters List, shall be included in the final secure cell certification report.

VI.D.8. The Final Secure Cell Certification Report (also referred to as the Final CQA Report) shall be submitted to the Department. No wastes shall be placed in a secure cell or a completed portion of a secure cell until the Department has approved, in writing that cell's or that portion of the cell's Final Secure Cell Certification Report**.**

VI.E. OPERATIONS REQUIREMENTS

VI.E.1. Collected leachate must be managed in accordance with the Waste Analysis Plan, Permit Attachment 2. The Permittee shall operate and maintain the Leachate Collection Systems and the Leak Detection Systems to remove leachate from the secure cells as specified below and in accordance with the Inspection Plan, Permit Attachment 3.

VI.E.1.a. The interior surface of each cell shall be inspected for accumulation of free liquids. The Permittee shall transfer ponded free liquids to the Contaminated Water Storage Tanks as soon as possible.

VI.E.1.b. Leachate accumulation shall be minimized by removal of leachate from each sump when the depth exceeds 0.67 feet as determined by inspections required by the Inspection Plan, Permit Attachment 3.

VI.E.1.c. Daily volume of liquids removed from each sump and liquid level measurement shall be recorded in the Operating Record. Leachate and leak detection liquids shall be sampled and analyzed as required by Part VII of this Permit.

VI.E.1.d. Accumulated liquids shall be removed from the leachate collection sump and leak detection sumps by pumping through the riser pipe. A submersible pump shall be used for leachate removal. The pumps shall be of sufficient size to collect and remove liquids from the sumps and prevent liquids from backing up into the drainage layers. [6 CCR 1007-3 §264.301(c)(2) and (3)]

VI.E.1.e. Accumulated leachate will be transferred by above ground piping to the Contaminated Water Tanks, or will be transfered to the Contaminated Water Tanks by vacuum truck.

VI.E.1.f. Piping will be chemical resistant and managed to avoid freezing. Leachate discharge piping is sized to provide pumping velocities of approximately 5 ft per second. The maximum operating pressure in the leachate discharge piping will be 135 psi.

VI.E.2. The Permittee shall construct, operate, and maintain the landfill so as to prevent the migration of any hazardous constituents into ground water or surface water, in accordance with 6 CCR 1007-3 §264.301(c), and comply with the following:

VI.E.2.a. All components of the cell or a specified portion of a cell shall be completed prior to the commencement of operations. This includes the leachate collection system, the access ramp, and the buffer material over the leachate collection system and on the side slopes.

VI.E.2.b. If a portion of a cell is to be constructed and used prior to completion of the entire cell, the design and operation plans and specifications for such activity must be submitted to and approved by CDPHE prior to commencement of construction of the cell. The approved design and operation plans and specifications will be incorporated into the Permit following the procedures of 6 CCR 1007-3 §100.63.

VI.E.3. Waste materials to be placed in the secure cells will be bulk solids, solidified blocks, and drummed solids. The bulk solids will consist of solidified sludges, treated material and direct landfill solids. Any intact drums will be filled with solids or crushed to eliminate significant voids to the extent practical. Space between drums will be filled with bulk solids to eliminate void space.

VI.E.4. Daily cover will be placed over the wastes. [6 CCR 1007-3 §264.301(j)]

VI.E.4.a. The daily cover will be either a six inch soil cover, a geosynthetic cover (either a geotextile or geomembrane), or a combination of both or other forms of cover approved by the Department.

VI.E.4.b. One type of geosynthetic cover which may be used is a woven geotextile reinforced with optional nylon strapping around the perimeter and 12 feet on center in both directions. The ends of the nylon strapping contain heavy duty D-rings to facilitate anchoring and heavy equipment hookup. The optional nylon strapping will be used to attach the cover to a spreader bar for deploying and removing the cover and also will be used to tie and/or anchor the cover down.

VI.E.4.c. Sand bags, buffer soil, or other items of sufficient weight that will not damage the cover maybe used to anchor the geosynthetic cover. Stakes may be used only if the cover is equipped with the appropriate attachments for staking. The stakes will be one to two feet long. The stakes will not be placed within six feet horizontally from the sideslope lining system or within three feet vertically of the cell floor lining system.

VI.E.4.d. When anchoring the geosynthetic cover, care will be taken to ensure that wind can't get beneath the cover and cause a "blowout."

VI.E.4.e. The entire perimeter of the cover will be anchored at the end of each day and tears within the cover shall be repaired within the same shift in which they are discovered.

VI.E.5. The bed of each truck entering the cell shall be covered with a tight fitting tarp over all waste. The tarp shall not be removed until disposal activities are ready to commence.

VI.E.6. Each truck exiting a cell shall be inspected for visible wastes; visible particles of wastes shall be swept, brushed or otherwise cleaned to remove all visible particles of waste from the tires and frame.

VI.E.7. Wind and precipitation gauges shall be installed at locations that provide accurate measurements.

VI.E.7.a. The Permittee shall install and maintain a wind anemometer and directional vane instrumentation on the roof of the Treatment

Building, with a recorder located in an easily accessible location. The instrument shall be alarmed such that the alarm is audible and/or visible from the active secure cell(s). Wind socks at appropriate locations shall be maintained.

VI.E.7.b. The Permittee shall install and maintain a g-type precipitation gauge located at a location easily accessible to inspectors. The gauge must be capable of registering rain or snow to an accuracy of not less than one-tenth (0.1) inch of water equivalent precipitation. The gauge shall be provided with a recording capacity of at least twelve inches.

VI.E.8. Shipments of wastes to a secure cell shall be halted during any time period whenever wind speed is high enough to blow wastes out of a cell. At a minimum, shipments of wastes to a secure cell shall be halted during any time wind speeds reach thirty-five miles per hour.

VI.E.8.a. Intermediate cover application shall commence or continue during periods of such high wind.

VI.E.8.b. Intermediate cover shall be placed over waste which has been placed above the crest of the landfill at any time when waste placement is non-active or waste placement is expected to be non-active for a period of two hours.

VI.E.8.b.i) During waste placement above the crest, a stockpile of soil or geosynthetic cover will be placed near the working face which will be used to cover the waste immediately after placement, should wind conditions warrant.

VI.E.8.b.ii) In addition, soil stabilization products or non-organic tackifiers may be used to seal the surface soils and reduce dust generation during high wind periods.

VI.E.8.c. The condition of the cover shall be maintained at all times to prevent loss of waste from the active secure cell(s).

VI.E.9. Wastes shall be placed in horizontal lifts, not to exceed 2 feet for soil like material and not to exceed four feet for debris like material, and compacted in place.

VI.E.9.a. The waste will be compacted to an in-place compressive strength of approximately 0.33 tons per square foot. Documentation of each lift's compressive strength will be maintained in the Operating Record.

VI.E.9.b. If an operating face, beyond that required for an individual lift is required, it will be sloped no steeper than 4H:1V from the base of the landfill to the planned maximum cover elevation and will be covered with daily cover.

VI.E.10. Waste filling will generally progress in horizontal lifts to near the crest of the secure cell.

VI.E.11. Waste placement above the crest of the secure cell shall be modified to form a V-trench around the perimeter of the secure cell that will have sufficient capacity to hold the runoff from active waste areas from a 24-hour, 8.2 inch storm event with one inch of freeboard.

VI.E.11.a. The V-trench will be formed by the side slopes of the secure cell and a 5H:1V waste fill slope. The depth of the V-trench will vary depending on the required storage capacity. The 5H:1V waste fill slope will continue until it intercepts the five percent final cover slope.

VI.E.11.b. During the final cover construction, the V-trench may be filled with waste as the active cell area is reduced. At all times, the Permittee must comply with Permit Condition VI.E.11.

VI.E.11.c. During waste placement above the crest, standing surface liquids which collect in the V-trench shall be removed within 12 hours after a storm event.

VI.F. PROCEDURES TO MANAGE AND CONTROL RUN-OFF

VI.F.1. Definitions

VI.F.1.a. **"Uncontaminated Stormwater"** means stormwater runoff and accumulated water that occurs in closed or undeveloped areas of

the site and is isolated and segregated from areas that contain, receive, or drain stormwater from waste processing areas.

VI.F.1.b. **"Contaminated Stormwater"** means stormwater runoff and accumulation water that comes into direct contact with waste materials or known contaminated areas.

VI.F.1.c. **"Segregated Stormwater"** means stormwater runoff and accumulated water which contacts or accumulates in areas of the site that could possibly come in contact with spills of waste material. Areas of segregated stormwater include all onsite roadways past the sampling station over which waste materials are transported, waste processing areas, partially closed secure cell areas, cell areas not containing waste or segregated by a divider berm, all equipment storage and parking areas for vehicles carrying wastes or vehicles which have not been externally washed after handling wastes.

VI.F.2. The Permittee must design, construct, operate, and maintain the run-off management system to collect and control at least the water volume resulting from a 24-hour, 1000 year storm event which has been defined as an 8.2 inch storm. [6 CCR 1007-3 §264.301(h)]

VI.F.3. The Permittee must follow the Surface Water System for the site as shown and specified in Permit Attachment 10, and comply with the requirements of this Section.

VI.F.4. The Stormwater Management System consists of series of channels designated Uncontaminated (UC) Channels and Segregated Stormwater (SS) Channels, culverts, drop structures, an Uncontaminated Detention Pond (UCDP), and a Segregated Stormwater Retention Pond (SSRB).

VI.F.4.a. The UC channels, SS channels, UCDP, and SSRB are located as shown in Figures 3 and 4 of Permit Attachment 1.

VI.F.4.b. The capacity of the SSRB is and shall be maintained at 4,300,000 gallons, which will contain runoff from the 8.2 inch storm event with two feet of freeboard.

VI.F.5. The Stormwater Management System will be implemented in phases as waste management processes require the closure and construction of individual cells.

VI.F.5.a. The Segregated Stormwater System facilities are temporary and will be removed as individual cells are closed. The SSRB will be closed when the facility closes.

VI.F.5.b. The UC ditches are permanent.

VI.F.6. Drainage Flow Paths

VI.F.6.a. Uncontaminated runoff will drain to and collect in the UCDP.

VI.F.6.b. Segregated runoff will drain directly to the SSRB. Runoff accumulating on Segregated Stormwater areas of the site will be removed by a pump truck and deposited in the SSRB or pumped directly to a SS channel that will flow to the SSRB.

VI.F.6.c. All contaminated water will be collected and transferred to the Contaminated Water Storage Tanks.

VI.F.7. Waste placement in secure cells shall progress such that liquid that is allowed to leach through the waste will be minimized.

VI.F.7.a. Removal of standing surface liquids on the surface of the waste and within segregated contaminated water areas shall commence during the next working shift following the storm event to prevent excessive ponding. Removal of storm water shall be continuous during operational hours until all standing water is removed.

VI.F.7.b. All liquids collected in this manner will be transferred to the Contaminated Water Tanks.

VI.F.8. The Permittee shall minimize standing water throughout the site including major areas of depression and secure cells under construction.

VI.F.8.a. Standing surface water will be removed within 24 hours of a storm event or as expeditiously as possible to prevent excess ponding.

VI.F.8.b. All liquids collected in this manner from areas of Segregated Stormwater accumulation, will be transfered to the Segregated Stormwater Retention Basin.

VI.F.8.c. All uncontaminated waters collected will be transfered to the UC drainage system.

VI.F.9. Stormwater Management System Descriptions

VI.F.9.a. Channels have been and will be constructed to the following criteria:

Grass-lined, V-shaped, with side slopes no steeper than 3H:1V for temporary channels and side slopes no steeper than 4H:1V for permanent channels.

Maximum stormwater flow depth in all channels is limited to four feet.

A minimum free board of 0.3 feet will be maintained for all future channels within the disposal area; a minimum free board of one inch of freeboard will be maintained for all currently constructed channels; freeboard at channel junctions and curved sections of channel will be increased to allow for elevated flow conditions.

A maximum flow velocity of five feet per second within the vegetated channels is allowed; if velocities exceed five feet per second, the channels will be lined with rip rap or other suitable erosion protection; CDPHE will be notified within seven days of the determination that flow velocities in any channel have exceeded five feet per second; the affected channel shall be lined with the erosion protection within 14 days of this determination.

Normal channel flow velocity for a design flow peak event will be less than the critical flow velocity. (All channel flows will be subcritical.)

Erosion protection will be placed at all channel junctions requiring such protection.

Erosion protection will be installed at the outlet of all culverts.

Bank protection, drop structures, and culverts will be designed and constructed as specified in Permit Attachment 10.

VI.F.9.b. The Segregated Stormwater Retention Basin has been constructed and must be maintained as follows (liner system is from bottom to top):

Prepared subgrade
40-mil HDPE Geomembrane Liner
Geocomposite leak detection layer
80-mil HDPE Geomembrane liner

VI.F.10. The Permittee shall maintain the permanent graduated level measuring devices marked in one tenth foot intervals installed in the SSRB.

VI.F.11. The Permittee shall maintain the totalizing flow meters or run-time meters for the pump which transfers water from the SSRB to the on-site wastewater treatment system.

VI.F.11.a. For the run-time meters, the Permittee shall provide a chart for use by site inspectors to correlate pump run-time with volume of water pumped.

VI.F.11.b. The Permittee shall incorporate calculations and test data in the Operating Record to demonstrate that the volume measurement system is accurate to within 5% of the actual volume of water pumped from the SSRB.

VI.F.12. The Permittee shall inspect the Stormwater Management System as specified in the Inspection Plan, Permit Attachment3.

VI.F.13. The Permittee shall maintain and repair impoundment liners, leak detection systems, dikes, walls, and floors to prevent or correct structural or waste containment failures due to stresses of installation and operation, soil compression or expansion, or chemical reaction. Repairs shall be conducted in accordance with the Remedial Action Procedures detailed in the Inspection Plan, Permit Attachment 3.

VI.F.14. Action Leakage Rate (ALR) and Response Actions

VI.F.14.a. The Action Leakage Rate for the SSRB is 1700 gpad.

VI.F.14.b. To determine if the response action rate has been exceeded, the Permittee must covert the monthly flow rate from the monitoring data obtained to an average daily flow rate (gallons per acre per day) for each sump.

VI.F.14.c. The following response actions must be taken if the response action rate has been exceeded, if a dike is found leaking, if liquid containing wastes, leachate, or any hazardous waste constituent is found in SSRB leak detection system, or if the level of liquid in the SSRB drops more than three inches in one day and the drop is not accounted for by pumping, evaporation and/or reflected in the volume of water contained in the leak detection system.

VI.F.14.c.i) Notify the Department in writing of the exceedance within 7 days of the determination;

VI.F.14.c.ii) Submit a preliminary written assessment to the Department within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size and cause of any leaks, and short-term actions taken and planned;

VI.F.14.c.iii) Determine to the extent practicable the location, size, and cause of any leak;

VI.F.14.c.iv) Determine whether stormwater inflow into the SSRB should cease or be curtailed, whether any water should be removed from the unit for inspection, repairs, or controls, and whether or not the SSRB should be closed;

VI.F.14.c.v.) Determine any other short-term and longer-term actions to be taken to mitigate or stop any liquids; and

VI.F.14.c.vi) Within 30 days after the notification that the response action rate has been exceeded, submit to the Department the results of the analyses specified in VI.F.14.d., the

results of actions taken, and actions planned. Monthly, thereafter, as long as the flow rate in the leak detection systems exceeds the response action rate, the Permittee must submit to the Department a report summarizing the results of any remedial actions taken and actions planned.

VI.F.14.d. To make the leak and/or remediation determinations in VI.F.15.c.iii), iv), and v), the Permittee must

VI.F.14.d.i) Assess the source of liquids, generation rates and amounts of liquid by source:

Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids, possible location of any leaks, and the hazard and mobility of the liquid; and

Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

VI.F.14.d.ii) Document why such assessments are not needed.

VI.G. ACTION LEAKAGE RATE FOR SECURE CELLS

V.G.1. The action leakage rate, calculated in accordance with 6 CCR 1007-3 §264.302(a), for secure disposal cells is as follows:

VI.G.1.a. For Secure Cell No. 1 the response action rate is 600 gallons of clean water removed from the leak detection sump in one week.

VI.G.1.b. For Secure Cell Nos. 2 - 7, the action leakage rate is 2400 gallons per acre per day (gpad).

VI.G.2. To determine if the action leakage rate has been exceeded, the Permittee must convert the weekly or monthly flow rate from the monitoring data obtained under Permit Condition VI.H.2., to an average daily flow rate (gallons per acre per day) for each sump. The average daily flow rate must be calculated weekly during the active life and closure period, and monthly during the post-closure care period when monthly monitoring is required

under 6 CCR 1007-3 §264.303(c)(2) and Permit Condition VI.H.2. [6 CCR 1007-3 §264.302(b)]

VI.G.3. If the liquid level in any sump rises more than one foot between daily inspections, the Permittee must implement the procedures of Permit Conditions V.H.1.b. and V.H.1.c., even if the Action Leakage Rate has not been exceeded. The results of the inspection required in Permit Condition V.H.1.c. will be recorded in the Operating Record and the Department shall be notified of the results.

VI.H. RESPONSE ACTIONS

If the ALR is exceeded for any of the Secure Cells 2-7 LDS sumps, the Permittee shall:

VI.H.1. Within 24 hours of becoming aware of the exceedance

VI.H.1.a. Verbally notify the Department of the exceedance. The notification shall include identification of the cell in which the exceedance occurred and the quantity of water which was in excess of the ALR

VI.H.1.b. Monitor the liquid level and remove any liquid from that Secure Cell's LDS sump

VI.H.1.c. Visually inspect all accessible portions of that cell's upper liner system for evidence of failure

VI.H.2. The monitoring and liquid removal shall occur for a total of 5 consecutive calendar days

VI.H.3. Obtain a sample of liquid from that Cell's Leachate Collection System (LCS) and a sample of the LDS water from the first re-inspection. Prior to sampling, the Permittee shall submit an analyte list to the Department. Upon approval by the Department, the Permittee shall obtain the sample and analyze the sample for the approved constituents. The results of these analyses shall be used to help identify the source(s) of the liquid and possible location of any leaks, as well as the potential hazard associated with the liquid and its mobility. The results of these analyses shall be submitted to the Department within 5 days of receipt.

VI.H.4. Assess the seriousness of any leaks in terms of potential for escaping into the environment

VI.H.5. Notify the Department in writing of the exceedance within 7 days of the determination of the exceedance.

VI.H.6. Determine if the flow rate into the LDS varies with precipitation events. If the flow rate varies with precipitation, the relationship between the flow rate and precipitation events must be analyzed (i.e. is flow rate instantaneously affected or is there a lag time).

VI.H.7. If the monitoring of liquids, conducted in accordance with VI.H.2. above do not continue to show exceedances of that Cell's ALR and no visual evidence of failure of the upper liner system is found, then the Permittee shall submit the records of the re-inspections to the Department within 5 days and may return to the normal inspections schedules for that Cell's LDS. The submittal must include an assessment as to why the exceedance occurred. This submittal must be approved by the Department to close-out the ALR exceedance incident.

VI.H.8. If the monitoring of liquids, conducted in accordance with V.H.2. above, continues to show an exceedance of the ALR for that Cell, the Permittee shall:

VI.H.8.a. Continue to monitor the liquids in the Secure Cells LDS on a daily basis and remove any liquids.

VI.H.8.b. Increase the inspections of that Cell's LCS to daily and remove any leachate within the LCS sump that exceeds 0.67 feet in depth

VI.H.9. Submit a preliminary written assessment by a qualified, Colorado Registered Professional Engineer to the Department within 14 days of the exceedance determination. The preliminary assessment shall include:

VI.H.9.a. All data collected relative to the quantity and quality of water removed from the LCS and LDS sumps

VI.H.9.b. An assessment as to the likely sources of liquids

VI.H.9.c. If the inspection in V.H.1. above identifies a primary liner failure in exposed portions of the liner, then the preliminary assessment shall include:

A plan for repairing the failure

An assessment as to whether the identified failure is the cause of the ALR exceedance and follow up monitoring necessary to verify that assessment

VI.H.9.d. If the investigations in V.H.1. and V.H.3. above do not identify a primary liner failure in the upper, exposed liner and/or the above assessment indicates that there may be other sources of the ALR exceedance, then the preliminary assessment will include a plan for assessing the existence, location, size, and cause of the suspected leak in the lower, waste covered primary liner system that may be causing the ALR exceedance. The plan will, at a minimum, address:

Applicable procedures for correlating the chemical analysis of LCS and/or LDS liquids with the records of waste characteristics and waste location within the cell

Analysis of LDS liquid accumulation rates versus potential size of a leak in the primary liner

The potential hazard of the liquid contained within the LDS sump and the potential for short term migration through the lower liner system

The frequency of any continued chemical analysis of liquids within the LCS and/or LDS

An assessment of the need for any reduction of waste receipts into the Cell. If waste receipts are to continue this assessment will address the following:

- The need for any short term removal of waste from the unit to facilitate inspection and/or repair

- The potential for continued waste receipts to increase the apparent leak in the primary liner system

The need for any short term removal of waste from the unit to facilitate inspection and/or repair

Determine any other short-term or long-term actions to be taken to mitigate or stop any leaks

A schedule for implementing the plans presented within the preliminary assessment. The schedule shall reflect implementation of the plans as soon as practicable

VI.H.10. Within 30 days after the notification that the ALR has been exceeded, a status report on implementation of the plans contained in the preliminary assessment shall be submitted to the Department. The status reports will continue to be submitted monthly, as long as the ALR is exceeded. The status reports will include, at a minimum, the results of the determinations described above, the results of any remedial actions taken, and a description of any further or modified actions planned.

VI.H.11. After making the determinations outlined within the preliminary assessment, the Permittee shall submit a final assessment, made by a qualified Registered Professional Engineer, of the ALR exceedance. The final assessment shall, at a minimum, address:

VI.H.11.a. The estimated location of a primary liner failure or justification that the ALR exceedance does not indicate a primary liner failure

VI.H.11.b. The need for any primary liner repair or justification if the liner is not to be repaired

VI.H.11.c. A plan for repairing the liner if required

VI.H.11.d. The plans for any required removal of waste from the Cell

VI.H.11.e. Plans and justification for any continued waste placement into the affected cell during the repair

VI.H.11.f. The final assessment shall be approved by the Department prior to implementation of the repair or close-out of the ALR exceedance incident

VI.H.12. After making the required repairs, a final report documenting the repairs must be submitted; the report shall include a certification by an independent, qualified Registered Professional Engineer certifying that the repairs were made in accordance with the approved plans. The final report shall be completed in accordance with the requirements of Permit Attachment 10.

VI.I. MONITORING AND INSPECTION

VI.I.1. The Secure Cells will be inspected according the Inspection Plan, Permit Attachment 3 and according to the following requirements.

VI.I.2. During operation, each secure cell must be inspected weekly and after storms to detect evidence of any of the following:

VI.I.2.a. Deterioration, malfunctions, or improper operation of runoff control systems;

VI.I.2.b. Proper functioning of wind dispersal control systems; and

VI.I.2.c. The presence of leachate in and proper functioning of all leachate collection and removal systems.

VI.I.3. The Permittee must record the amount of liquids removed from each leak detection sump each day that liquids are removed from a leak detection system during the active life of the Facility and at least once each week during periods when liquids have not been removed daily from the system during the active life and closure period.

VI.I.4. The Permittee must record the amounts of liquid removed from each leak detection sump in compliance with the Post Closure Care Plan, Permit Attachment 7.

VI.J. SURVEYING AND RECORD KEEPING

The Permittee must maintain the following items in the operating record

VI.J.1. On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and

VI.J.2. The location and quantity of each hazardous waste placement recorded on a map or diagram for each secure cell using a three dimensional grid system. [6 CCR 1007-3 §264.309]

VI.J.3. One year after issuance of this Permit, and annually thereafter, the Permittee shall provide the Department with "as-built" drawings of the disposal facility until this Permit and the License from the Radiation Control Division are terminated or until the final waste volume is received at the facility, as required by Colorado Rules and Regulations Pertaining to Radiation Control RH 11.3.7.

VI.K. CLOSURE AND POST CLOSURE CARE

VI.K.1. At final closure of each secure cell, the Permittee must cover each cell with a final cover designed and constructed in accordance with 6 CCR 1007-3 §264.310(a) and in accordance with Permit Attachments 7 and 10.

VI.K.2. After the final closure of each cell, the Permittee must comply with all post-closure requirements contained in 6 CCR 1007 §264.117 through §264.120 and contained in the Post Closure Care Plan, Permit Attachment 7, including maintenance and monitoring throughout the post closure care period. The Permittee must:

VI.K.2.a. Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

VI.K.2.b. Continue to operate the leachate collection and removal system until leachate is no longer detected;

VI.K.2.c. Maintain and monitor the leak detection system in accordance with 6 CCR 1007-3 §264.301(c)(3)(iv) and (4) and 264.303(c) and this Permit, and comply with all other applicable leak detection system requirements of 6 CCR 1007-3 §264, Subpart N;

VI.K.2.d. Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of Subpart F of 6 CCR 1007-3 §264.

VI.K.2.e. Prevent run-off from eroding or otherwise damaging the final cover; and

VI.K.2.f. Protect and maintain surveyed benchmarks used in complying with Permit Condition VI.J. [6 CCR 1007-3 §264.310]

VI.L. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

VI.L.1. Wastes which are ignitable below 140°F shall not be placed in the landfill.

VI.L.2. Except as provided in Permit Condition VI.L.3., and in Permit Condition VI.P., ignitable or reactive waste will not be placed in the secure cells, unless the applicable requirements of 6 CCR 1007-3 Part 268 are met and

VI.L.2.a. The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under 6 CCR 1007 §261.21 or §261.23 and

VI.L.2.b. Permit Condition II.G. and 6 CCR 1007-3 §264.17 are complied with. [6 CCR 1007-3 §264.312(a)]

VI.L.3. Except for prohibited wastes which remain subject to treatment standards in Subpart D of 6 CCR 1007-3 §268, ignitable wastes in containers may be landfilled without meeting the requirements of Permit Condition VI.L.2., provided that the wastes are disposed of in such a way that they are protected from any material or conditions which may cause them to ignite. At a minimum, ignitable wastes must be disposed of in non-leaking containers which are carefully handled and placed so as to avoid heat, sparks, rupture or any other condition that might cause ignition of the wastes; must be covered daily with soil or non-combustible material to minimize the potential for ignition of the wastes; and must not be disposed of in cells that contain or will contain other wastes which may generate heat sufficient to cause ignition of the waste. [6 CCR 1007-3 §264.312(b)]

VI.M. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

Incompatible wastes, or incompatible wastes and materials, per Appendix I of the Waste Analysis Plan, Permit Attachment 2 or Appendix V of 6 CCR 1007-3 Part 264, must not be placed in the same secure cell, unless Permit Condition II.G. and 6 CCR 1007-3 §264.17 are complied with. [6 CCR 1007-3 §264.313]

VI.N. SPECIAL REQUIREMENTS FOR BULK AND CONTAINERIZED LIQUIDS

VI.N.1. The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any secure cell is prohibited. [6 CCR 1007-3 §264.314(a)]

VI.N.2. Containers holding free liquid will not be placed in any secure cell unless all free standing liquid:

has been removed by decanting, or other method;
has been mixed with sorbent or solidified so that free standing liquid is no longer observed; or
has been otherwise eliminated; or
the container is very small, such as an ampule; or
the container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or
The container is a lab pack as defined by 6 CCR 1007-3 §264.316, and is disposed of in accordance with Permit Condition V.P. [6 CCR 1007-3 §263.314(c)]

VI.N.3. To demonstrate that the absence or presence of free liquids in either a containerized or a bulk waste, the following must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", EPA Publication SW-846. [6 CCR 1007-3 §264.314(d)]

VI.N.4. Sorbents used to treat free liquids to be disposed of in the secure cells must be nonbiodegradable. Nonbiodegradable sorbents are materials listed or described in paragraph (a) of this condition; materials that pass one of the tests in paragraph (b) of this condition; or materials that are determined by EPA to be nonbiodegradable through 40 CFR Part 260 petition process.

VI.N.4.a. Nonbiodegradable sorbents:

VI.N.4.a.i) Inorganic minerals, other inorganic materials, and elemental carbon (e.g. aluminosilicates, clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas (illite), vermiculites, zeolites, calcium carbonate (organic free limestone); oxides/hydroxides, alumina, lime, silica (sand), diatomaceous earth, perlite (volcanic glass); expanded volcanic rock, volcanic ash, cement kiln dust, fly ash, rice hull ash, activated charcoal/activated carbon), or

VI.N.4.a.ii) High molecular weight synthetic polymers (e.g. polyethylene, high density polyethylene (HDPE), polypropylene, polystyrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, cross-linked allylstryrene and tertiary butyl copolymers. This does not include polymers derived from biological materials or polymers specifically designed to be degradable; or

VI.N.4.a.iii) Mixtures of these nonbiodegradable materials. [6 CCR 1007-3 §264.314(e)(1)]

VI.N.4.b. Tests for nonbiodegradable sorbents.

VI.N.4.b.i) The sorbent material is determined to be nonbiodegradable under ASTM Method G22-70 (1984a)-Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi; or

VI.N.4.b.ii) The sorbent material is determined to be nonbiodegradable under ASTM Method G22-76 (1984b)-Standard Practice for Determining the Resistance of Plastics to Bacteria; or

VI.N.4.b.iii) The sorbent material is determined to be nonbiodegradable under the Organization for Economic Cooperation and Development (OECD) Test 301B:[CO_2 Evolution (Modified Sturm Test), July 1992]. [6 CCR 1007-3 §264.314(e)(2)]

VI.N.5. The placement of any free liquid, including a hazardous waste or water, in a secure cell is prohibited. [6 CCR 1007-3 §264.314(f)]

VI.O. SPECIAL REQUIREMENTS FOR CONTAINERS

VI.O.1. Unless they are very small, such as an ampule, containers will either be:

At least 90 percent full when placed in the secure cells; or

Emptied and crushed flat, shredded, or similarly reduced in volume to the maximum practical extent before burial in the secure cells. [6 CCR 1007-3 §264.315]

VI.O.2. Drummed materials with no free liquid and measurable void space will be treated as follows:

Drums with less than 15% void space may be topped off with filler material. Filler will consist of clean fill material or compatible waste.

Drums with greater than 15% void space will be processed through the treatment system in the Treatment Building prior to secure cell disposal.

VI.O.3. Drums containing liquids, semi-solid, or solid waste material with free liquids will be processed in the treatment system in the Treatment Building. Drums will be emptied and crushed or shredded (with or without their contents) prior to secure cell disposal.

VI.P. DISPOSAL OF SMALL CONTAINERS OF HAZARDOUS WASTE IN OVERPACKED DRUMS (LAB PACKS)

Small containers of hazardous waste in overpacked drums (LAB packs) may be placed in a secure cell if the following requirements are met:

VI.P.1. Hazardous waste must be packaged in non-leaking inside containers. The inside containers must be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the contained waste. Inside containers must be tightly and securely sealed. The inside containers must be of the size and type specified in the Department of Transportation (DOT) hazardous

materials regulations (49 CFR parts 173, 178, and 179), if those regulations specify a particular inside container for the waste. [6 CCR 1007-3 §264.316(a)]

VI.P.2. The inside containers must be overpacked in an open head DOT-specification metal shipping container (49 CFR Parts 178 and 179) of no more than 416-liter (110 gallon) capacity and surrounded by, at a minimum, a sufficient quantity of sorbent material, determined to be nonbiodegradable in accordance with Permit Condition VI.N.4., to complete sorb all of the liquid contents of the inside containers. The metal outer container must be full after it has been packed with inside containers and sorbent material. [6 CCR 1007-3 §264.316(b)]

VI.P.3. The sorbent material used must not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers in accordance with 6 CCR 1007-3 §264.17(b). [6 CCR 1007-3 §264.316(c)]

VI.P.4. Incompatible wastes, as defined in 6 CCR 1007-3 §260.10, must not be placed in the same outside container. [6 CCR 1007-3 §264.316(d)]

VI.P.5. Reactive wastes, other than cyanide- or sulfide-bearing waste as defined in 6 CCR 1007-3 §261.23(a)(5), must be treated or rendered non-reactive prior to packaging in accordance with Permit Conditions V.P.1 through V.P.4. Cyanide- and sulfide-bearing reactive waste may be packed in accordance with Permit Conditions VI.P.1. through VI.P.4. without first being treated or rendered non-reactive. [6 CCR 1007-3 §264.316(e)]

VI.P.6. Such disposal is in compliance with the requirements of 6 CCR 1007-3 Part 268 and Permit Condition VI.B.5. [6 CCR 1007-3 §264.316(f)]

VI.Q. SPECIAL REQUIREMENTS FOR HAZARDOUS WASTES F020, F021, F022, F023, F026, AND F027

The Permittee must manage hazardous wastes F021, F021, F022, F023, F026, and F027 in accordance with the following and the "Dioxin Management Plan," Appendix I, of Permit Attachement 2, Waste Analysis Plan:

VI.Q.1. Waste Analysis

VI.Q.a. The Permittee shall follow the procedures in Section III.F.4. of the Waste Analysis Plan, Permit Attachment 2 for pre-acceptance of hazardous wastes F020 through F023, F026 and F027.

VI.Q.b. The Permittee shall follow the procedures in Section IV.B.4. of the Waste Analysis Plan, Permit Attachment 2 for on-site acceptance of the hazardous wastes F020 through F023, F026 and F027.

VI.Q.2. Waste Receiving and Handling

VI.Q.2.a. Waste containers will be kept closed or tarped except during the process of waste sampling and waste unloading into either the unloading area of the treatment basins or the landfill.

VI.Q.2.b. Dioxin and furan wastes may be treated to meet other treatment standards, such characteristic metals, load bearing, reduction of dust generations potential, free-liquids criteria or other treatment without approval by the Division.

VI.Q.2.c. For wastes which require treatment prior to secure cell disposal, the following unloading procedures at the Treatment Building will be followed to minimize particulate dispersion:

VI.Q.2.c.i) Untarping of bulk loads and/or opening of containers will occur only at the time of unloading or sampling. No load will be untarped or opened prior to positioning the truck and/or container inside the Treatment building.

VI.Q.2.c.ii) Bulk loads will be checked prior to commencing unloading to determine if the addition of water is required to minimize dust generation. Water will be applied to dry waste material during unloading inside the Treatment Building to minimize dust.

VI.Q.2.d. Unloading at the secure cell will be in accordance with the following to minimize particulate dispersion:

VI.Q.2.d.i) Trucks or containers will not be uncovered until they are in the unloading position in the landfill.

VI.Q.2.d.ii) Dioxin and furan waste placed in the landfill must be covered as soon as transfer and placement activities for that waste are completed. If a campaign or batch is only

partially transferred and placed in the cell and a break in the transfer or placement process is necessary, then the waste must be covered.

VI.Q.3.Co-Disposal Compatibility

The waste addressed by this management plan shall not be received at the Facility unless the residual dioxin and furan constituent concentrations meet the treatment standard established in 40 CFR and/or 6 CCR 1007-3, §268.40. This requirement combined with the waste compatibility review procedures outlined in the WAP will ensure these wastes are compatible with co-disposed waste in the cell.

VI.Q.4. Environmental Monitoring and Secure Cell Inspection

Secure Disposal Cell Operations include scheduled inspections to verify that the physical integrity of the cell liner systems is maintained. The inspection requirements are outlined in Inspection Plan, Attachment 3. The inspection, sampling and analysis of collected liquids from the Leachate Collection System and the Leak Detection System will be performed as described by the Inspection Plan.

APPENDIX A

(Modified 40 CFR§261, Appendix VIII
Constituent List)

Common Name	Chemical Abstract Name	Chemical Abstract No.	Hazardous Waste No	Test Methods (comparable test methods acceptable)
8260B VOCs				
1,1,1,2-Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	630–20–6	U208	8260B
1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79–34–5	U209	8260B
1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	79–00–5	U227	8260B
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75–35–4	U078	8260B
1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96–18–4		8260B
1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	96–12–8	U066	8260B
1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156–60–5	U079	8260B
1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542–75–6	U084	8260B
1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764–41–0	U074	8260B
2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110–75–8	U042	8260B
Acetonitrile	Same	75–05–8	U003	8260B
Acrolein	2-Propenal	107–02–8	P003	8260B
Acrylonitrile	2-Propenenitrile	107–13–1	U009	8260B
Allyl chloride	1-Propane, 3-chloro	107–05–1		8260B
Benzene	Same	71–43–2	U019	8260B
Bromoform	Methane, tribromo-	75–25–2	U225	8260B
Carbon disulfide	Same	75–15–0	P022	8260B
Carbon tetrachloride	Methane, tetrachloro-	56–23–5	U211	8260B
Chlorobenzene	Benzene, chloro-	108–90–7	U037	8260B
Chloroform	Methane, trichloro-	67–66–3	U044	8260B
Chloroprene	1,3-Butadiene, 2-chloro-	126–99–8		8260B
Dichlorodifluoromethane	Methane, dichlorodifluoro-	75–71–8	U075	8260B
Ethyl cyanide	Propanenitrile	107–12–0	P101	8260B
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	U118	8260B
Ethylene dibromide	Ethane, 1,2-dibromo-	106–93–4	U067	8260B
Ethylene dichloride	Ethane, 1,2-dichloro-	107–06–2	U077	8260B
Ethylidene dichloride	Ethane, 1,1-dichloro-	75–34–3	U076	8260B
Isobutyl alcohol	1-Propanol, 2-methyl-	78–83–1	U140	8260B
m-Dichlorobenzene	Benzene, 1,3-dichloro-	541–73–1	U071	8260B
Methacrylonitrile	2-Propenenitrile, 2-methyl-	126–98–7	U152	8260B
Methyl bromide	Methane, bromo-	74–83–9	U029	8260B
Methyl chloride	Methane, chloro-	74–87–3	U045	8260B
Methyl chloroform	Ethane, 1,1,1-trichloro-	71–55–6	U226	8260B
Methyl ethyl ketone (MEK)	2-Butanone	78–93–3	U159	8260B
Methyl iodide	Methane, iodo-	74–88–4	U138	8260B
Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80–62–6	U162	8260B
Methylene bromide	Methane, dibromo-	74–95–3	U068	8260B
Methylene chloride	Methane, dichloro-	75–09–2	U080	8260B
Propylene dichloride	Propane, 1,2-dichloro-	78–87–5	U083	8260B
Tetrachloroethylene	Ethene, tetrachloro-	127–18–4	U210	8260B
Toluene	Benzene, methyl-	108–88–3	U220	8260B
Trichloroethylene	Ethene, trichloro-	79–01–6	U228	8260B
Trichloromonofluoromethane	Methane, trichlorofluoro-	75–69–4	U121	8260B
Vinyl chloride	Ethene, chloro-	75–01–4	U043	8260B
1,4-Diethyleneoxide	1,4-Dioxane	123–91–1	U108	8260B

8270C SVOCs				
1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95–94–3	U207	8270C
1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro-	120–82–1		8270C
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122–66–7	U109	8270C
1,3,5-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99–35–4	U234	8270C
1,4-Naphthoquinone	1,4-Naphthalenedione	130–15–4	U166	8270C
2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58–90–2	See F027	8270C
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	95–95–4	See F027	8270C
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	88–06–2	See F027	8270C
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120–83–2	U081	8270C
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105–67–9	U101	8270C
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51–28–5	P048	8270C

2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121–14–2	U105	8270C
2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87–65–0	U082	8270C
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606–20–2	U106	8270C
2-Acetylaminefluarone	Acetamide, N-9H-fluoren-2-yl-	53–96–3	U005	8270C
2-Picoline	Pyridine, 2-methyl-	109–06–8	U191	8270C
3,3′-Dichlorobenzidine	[1,1′-Biphenyl]-4,4′-diamine, 3,3′-dichloro-	91–94–1	U073	8270C
3,3′-Dimethylbenzidine	[1,1′-Biphenyl]-4,4′-diamine, 3,3′-dimethyl-	119–93–7	U095	8270C
3-Methylcholanthrene	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56–49–5	U157	8270C
4,4′-Methylenebis(2-chloroaniline)	Benzenamine, 4,4′-methylenebis[2-chloro-	101–14–4	U158	8270C
4,6-Dinitro-o-cresol	Phenol, 2-methyl-4,6-dinitro-	534–52–1	P047	8270C
4-Aminobiphenyl	[1,1′-Biphenyl]-4-amine	92–67–1		8270C
4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	101–55–3	U030	8270C
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99–55–8	U181	8270C
7,12-Dimethylbenz[a]anthracene	Benz[a]anthracene, 7,12-dimethyl-	57–97–6	U094	8270C
Acetophenone	Ethanone, 1-phenyl-	98–86–2	U004	8270C
Acrylamide	2-Propenamide	79–06–1	U007	8270C
alpha,alpha-Dimethylphenethylamine	Benzeneethanamine, alpha,alpha-dimethyl-	122–09–8	P046	8270C
alpha-Naphthylamine	1-Naphthalenamine	134–32–7	U167	8270C
Aniline	Benzenamine	62–53–3	U012	8270C
Aramite	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	140–57–8		8270C
Benz[a]anthracene	Same	56–55–3	U018	8270C
Benzal chloride	Benzene, (dichloromethyl)-	98–87–3	U017	8270C
Benzidine	[1,1′-Biphenyl]-4,4′-diamine	92–87–5	U021	8270C
Benzo(k)fluoranthene	Same	207–08–9		8270C
Benzo[a]pyrene	Same	50–32–8	U022	8270C
Benzo[b]fluoranthene	Benz[e]acephenanthrylene	205–99–2		8270C
beta-Chloronaphthalene	Naphthalene, 2-chloro-	91–58–7	U047	8270C
beta-Naphthylamine	2-Naphthalenamine	91–59–8	U168	8270C
Butyl benzyl phthalate	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	85–68–7		8270C
Carbofuran phenol	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	1563–38–8	U367	8270C
Chlorobenzilate	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	510–15–6	U038	8270C
Chrysene	Same	218–01–9	U050	8270C
Cresol (Cresylic acid)	Phenol, methyl-	1319–77–3	U052	8270C
Diallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	2303–16–4	U062	8270C
Dibenz[a,h]acridine	Same	226–36–8		8270C
Dibenz[a,h]anthracene	Same	53–70–3	U063	8270C
Dibenz[a,j]acridine	Same	224–42–0		8270C
Dibenzo[a,e]pyrene	Naphtho[1,2,3,4-def]chrysene	192–65–4		8270C
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84–74–2	U069	8270C
Dichloroethyl ether	Ethane, 1,1′oxybis[2-chloro-	111–44–4	U025	8270C
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84–66–2	U088	8270C
Diethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117–81–7	U028	8270C
Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester	60–51–5	P044	8270C
Dimethyl phthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131–11–3	U102	8270C
Dinitrobenzene, N.O.S.[1]	Benzene, dinitro-	25154–54–5		8270C
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117–84–0	U017	8270C
Di-n-propylnitrosamine	1-Propanamine, N-nitroso-N-propyl-	621–64–7	U111	8270C
Diphenylamine	Benzenamine, N-phenyl-	122–39–4		8270C
Disulfoton	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester	298–04–4	P039	8270C
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	62–50–0	U119	8270C
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110–80–5	U359	8270C
Famphur	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester	52–85–7	P097	8270C
Fluoranthene	Same	206–44–0	U120	8270C
Fluorine	Same	7782–41–4	P056	8270C
Hexachlorobenzene	Benzene, hexachloro-	118–74–1	U127	8270C
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87–68–3	U128	8270C
Hexachlorocyclopentadiene	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77–47–4	U130	8270C
Hexachloroethane	Ethane, hexachloro-	67–72–1	U131	8270C

Hexachlorophene	Phenol, 2,2′-methylenebis[3,4,6-trichloro-	70–30–4	U132	8270C
Hexachloropropene	1-Propene, 1,1,2,3,3,3-hexachloro-	1888–71–7	U243	8270C
Indeno[1,2,3-cd]pyrene	Same	193–39–5	U137	8270C
Isosafrole	1,3-Benzodioxole, 5-(1-propenyl)-	120–58–1	U141	8270C
Methapyrilene	1,2-Ethanediamine, N,N-dimethyl-N′-2-pyridinyl-N′-(2-thienylmethyl)-	91–80–5	U155	8270C
Methyl methanesulfonate	Methanesulfonic acid, methyl ester	66–27–3		8270C
Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298–00–0	P071	8270C
Naphthalene	Same	91–20–3	U165	8270C
Nitrobenzene	Benzene, nitro-	98–95–3	U169	8270C
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55–18–5	U174	8270C
N-Nitrosodimethylamine	Methanamine, N-methyl-N-nitroso-	62–75–9	P082	8270C
N-Nitrosodi-n-butylamine	1-Butanamine, N-butyl-N-nitroso-	924–16–3	U172	8270C
N-Nitrosomethylethylamine	Ethanamine, N-methyl-N-nitroso-	10595–95–6		8270C
N-Nitrosomorpholine	Morpholine, 4-nitroso-	59–89–2		8270C
N-Nitrosopiperidine	Piperidine, 1-nitroso-	100–75–4	U179	8270C
N-Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930–55–2	U180	8270C
O,O,O-Triethyl phosphorothioate	Phosphorothioic acid, O,O,O-triethyl ester	126–68–1		8270C
O,O-DiethylO-pyrazinylphosphoro-thioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297–97–2	P040	8270C
o-Chlorophenol	Phenol, 2-chloro-	95–57–8	U048	8270C
o-Dichlorobenzene	Benzene, 1,2-dichloro-	95–50–1	U070	8270C
o-Toluidine	Benzenamine, 2-methyl-	95–53–4	U328	8270C
Parathion	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56–38–2	P089	8270C
p-Chloroaniline	Benzenamine, 4-chloro-	106–47–8	P024	8270C
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59–50–7	U039	8270C
p-Dichlorobenzene	Benzene, 1,4-dichloro-	106–46–7	U072	8270C
p-Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-(phenylazo)-	60–11–7	U093	8270C
Pentachlorobenzene	Benzene, pentachloro-	608–93–5	U183	8270C
Pentachloroethane	Ethane, pentachloro-	76–01–7	U184	8270C
Pentachloronitrobenzene (PCNB)	Benzene, pentachloronitro-	82–68–8	U185	8270C
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62–44–2	U187	8270C
Phenol	Same	108–95–2	U188	8270C
Phenylenediamine	Benzenediamine	25265–76–3		8270C
Phorate	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester	298–02–2	P094	8270C
Phthalic anhydride	1,3-Isobenzofurandione	85–44–9	U190	8270C
p-Nitroaniline	Benzenamine, 4-nitro-	100–01–6	P077	8270C
p-Nitrophenol	Phenol, 4-nitro-	100–02–7	U170	8270C
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950–58–5	U192	8270C
Pyridine	Same	110–86–1	U196	8270C
Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94–59–7	U203	8270C
Tetraethyldithiopyrophosphate	Thiodiphosphoric acid, tetraethyl ester	3689–24–5	P109	8270C
Tris(2,3-dibromopropyl) phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126–72–7	U235	8270C
Isodrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta, 8beta,8abeta)-	465–73–6	P060	8270C

8290A Dioxins/Furans				
Heptachlorodibenzofurans				8290A
Heptachlorodibenzo-p-dioxins				8290A
Hexachlorodibenzofurans				8290A
Hexachlorodibenzo-p-dioxins				8290A
Octachlorodibenzofuran (OCDF)	1,2,3,4,6,7,8,9-Octachlorodibenofuran	39001–02–0		8290A
Octachlorodibenzo-p-dioxin (OCDD)	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268–87–9		8290A
Pentachlorodibenzofurans				8290A
Pentachlorodibenzo-p-dioxins				8290A
TCDD	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	1746–01–6		8290A
Tetrachlorodibenzofurans				8290A
Tetrachlorodibenzo-p-dioxins				8290A
8081A Pesticides				
Dieldrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta, 6aalpha,7beta,7aalpha)-	60–57–1	P037	8081A

Aldrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha, 8abeta)-	309–00–2	P004	8081A
Chlordane	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	57–74–9	U036	8081A
Chlordane (alpha and gamma isomers)			U036	8081A
DDD	Benzene, 1,1′-(2,2-dichloroethylidene)bis[4-chloro-	72–54–8	U060	8081A
DDE	Benzene, 1,1′-(dichloroethenylidene)bis[4-chloro-	72–55–9		8081A
DDT	Benzene, 1,1′-(2,2,2-trichloroethylidene)bis[4-chloro-	50–29–3	U061	8081A
Endosulfan	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a- hexahydro-, 3-oxide	115–29–7	P050	8081A
Endrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-, (1aalpha,2beta,2abeta,3alpha,6alpha, 6abeta,7beta,7aalpha)-	72–20–8	P051	8081A
Heptachlor	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76–44–8	P059	8081A
Heptachlor epoxide	2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexa- hydro-, (1aalpha,1bbeta,2alpha,5alpha, 5abeta,6beta,6aalpha)-	1024–57–3		8081A
Kepone	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	143–50–0	U142	8081A
Lindane	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha, 5alpha,6beta)-	58–89–9	U129	8081A
Methoxychlor	Benzene, 1,1′-(2,2,2-trichloroethylidene)bis[4-methoxy-	72–43–5	U247	8081A
Toxaphene	Same	8001–35–2	P123	8081A
8082 PCBs				
Polychlorinated biphenyls, N.O.S.[1]				8082
8321A Carbamates				
Aldicarb	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime	116–06–3	P070	8321A_Carbamates
Carbaryl	1-Naphthalenol, methylcarbamate	63–25–2	U279	8321A_Carbamates
Carbofuran	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	1563–66–2	P127	8321A_Carbamates
Methiocarb	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	2032–65–7	P199	8321A_Carbamates
Methomyl	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester	16752–77–5	P066	8321A_Carbamates
Mexacarbate	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	315–18–4	P128	8321A_Carbamates
Propham	Carbamic acid, phenyl-, 1-methylethyl ester	122–42–9	U373	8321A_Carbamates
Propoxur	Phenol, 2-(1-methylethoxy)-, methylcarbamate	114–26–1	U411	8321A_Carbamates
8321A Herbicides				
2,4,5-T	Acetic acid, (2,4,5-trichlorophenoxy)-	93–76–5	See F027	8321A_Herbicides
2,4-D	Acetic acid, (2,4-dichlorophenoxy)-	94–75–7	U240	8321A_Herbicides
Dinoseb	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88–85–7	P020	8321A_Herbicides
Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93–72–1	See F027	8321A_Herbicides
Pentachlorophenol	Phenol, pentachloro-	87–86–5	See F027	8321A_Herbicides
8330A Explosives				
Nitroglycerin	1,2,3-Propanetriol, trinitrate	55–63–0	P081	8330A

6010B/7471A Metals				
Antimony	Same	7440–36–0		6010B
Arsenic	Same	7440–38–2		6010B
Barium	Same	7440–39–3		6010B
Cadmium	Same	7440–43–9		6010B
Chromium	Same	7440–47–3		6010B
Lead	Same	7439–92–1		6010B
Nickel	Same	7440–02–0		6010B
Selenium	Same	7782–49–2		6010B
Silver	Same	7440–22–4		6010B
Thallium	Same	7440–28–0		6010B
Mercury	Same	7439–97–6	U151	7471A
6010B/7471A Metals Add'l Elements Not referenced in Table VIII				
Beryllium	Same	7440-38-2		6010B
Cobalt	Same	7440-48-4		6010B
Copper	Same	7440-50-8		6010B
Vanadium	Same	7440-62-2		6010B
Zinc	Same	7440-66-6		6010B

Hydrazine				
1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57–14–7	U098	DV-WC-0077
Hydrazine	Same	302–01–2	U133	DV-WC-0077
Methyl hydrazine	Hydrazine, methyl-	60–34–4	P068	DV-WC-0077
General Chemistry				
Cyanides (soluble salts and complexes) N.O.S.[1]			P030	9012A
General Chemistry Parameters Not reference in Table VIII				
Sulfides				9034
Fluoride				9056
Sulfate				9056
Chloride				9056
Bromide				9056
pH				9045C